

Docket No. 247881US0

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: Koji WADA, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: ALUMINUM ALLOY MEMBER SUPERIOR IN CORROSION RESISTANCE AND PLASMA RESISTANCE

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

**REFERENCES**

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**RELATED CASES**

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**CERTIFICATION**

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

**DEPOSIT ACCOUNT**

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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PLASMA RESISTANCE

**STATEMENT OF RELEVANCY**

**References AA (US 5,069,938) and AB (US 5,494,713) on Form PTO- 1449:**

These references are discussed in the specification.

**Reference AO (JP 5-53870) on Form PTO- 1449:**

This reference is discussed in the specification.

**PURPOSE:** To reduce the weight of an apparatus and to improve the heat conductivity by forming anodic oxide films on a box-shaped Al body and an Al lid for a vacuum chamber and evaporating and removing water by heat treatment.

**CONSTITUTION:** Anodic oxide films are formed on at least the insides of a box-shaped Al body and an Al lid for a vacuum chamber with an oxalic acid solution or the like. The thickness of the films is about 0.5W20 $\mu$ m. Heat treatment is then carried out at about 100W150°C for about 5W20hr to evaporate and remove water adsorbed on the anodic oxide films. By this method, a vacuum chamber having satisfactory heat conductivity can simply be manufactured at a low cost. The resistance of the vacuum chamber to corrosion by gases used in CVD and dry etching are comparable to or higher than that of a stainless steel vacuum chamber.

**Reference AP (JP 3-72098) on Form PTO- 1449:**

This reference is discussed in the specification.

**PURPOSE:** To improve corrosion resistance as well as to make an anodically oxidized film flexible, to prevent cracking and to reduce the rate of discharge of gas by forming the film on an Al material contg. a specified amt. of Cu and by carrying out electrolysis under prescribed conditions.

**CONSTITUTION:** An Al alloy consisting of 0.05-4wt.% Cu and the balance Al is refined and worked to obtain an Al material for vacuum having a prescribed shape. This Al material is anodically oxidized in an electrolytic solution containing oxalic acid to form an anodically oxidized film on the surface. The voltage is then suddenly dropped and electrolysis is carried out at 5-50V constant voltage in the electrolytic solution.

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**STATEMENT OF RELEVANCY**

**Reference AQ (EP 0 648 866) on Form PTO- 1449:**

This reference is discussed in the specification.

Form PTO 1449  
(Modified)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.  
247881US0SERIAL NO.  
New Application

## LIST OF REFERENCES CITED BY APPLICANT

APPLICANT  
Koji WADA, et al.FILING DATE  
Herewith

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,069,938	12/03/91	D'Arcy H. LORIMER, et al.			
	AB	5,494,713	02/27/96	Hayashi OOTUKI			
	AC	2003/0035970	02/20/03	Koji WADA, et al.			
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AO	5-53870	08/11/93	Japan		x
	AP	3-72098	03/27/91	Japan		x
	AQ	0 648 866	04/19/95	Europe		
	AR					
	AS					
	AT					
	AU					
	AV					

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	
	AX	
	AY	
	AZ	<input type="checkbox"/> Additional References sheet(s) attached

Examiner

Date Considered

\*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.